AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-15 (canceled)

16. (new) In a communication device having a speech input device and a voice output device in proximity to one another wherein an output from the voice output device may be feedback to the speech input device, a method of applying loss insertion into the communication device to prevent feedback oscillations/acoustic instability between the speech input device and the voice output device, comprising the steps of:

modulating a pseudo-random noise signal with a signal envelope of a signal to the voice output device; and

applying the modulated pseudo-random noise signal as an identification mark to the output from the voice output device.

17. (new) The method of claim 16, further comprising the step of:

introducing insertion loss in the inactive path of the speech input device and the voice output device based on their relative signal levels in order to reduce the feedback oscillations.

18. (new) The method of claim 17 wherein the step of introducing insertion loss includes:

introducing the insertion loss based on a comparison of the signal envelope of the signal to the voice output device and a signal envelope of a signal from the speech input device.

19. (new) The method of claim 18 wherein the step of introducing insertion loss further includes:

introducing the insertion loss based on a correlation between the speech input and voice output as modified by the identification marker to differentiate between the input and output.

20. (new) The method of claim 17, wherein the step of:

introducing insertion loss is effective to prevent buildup of feedback where neither incoming nor outgoing speech is present.

21. (new) The method of claim 17, wherein the step of:

introducing an insertion loss is accomplished by modifying at least one of a gain of received loudspeaker speech and a gain of human input speech.

22. (new) The method of claim 16, including a further step of:

using several frequency sub-bands, each with PN sequence to adjust switched loss in each of the bands.

23. (new) A speakerphone connected to a communication network, comprising:

a loudspeaker for providing voice output connected to an output path from the communication network, the output path having envelope detection;

a microphone for accepting voice input connected to an input path to the communication network;

a pseudo-noise sequence generator;

a gain cell connected to the pseudo-noise generator for modulating a pseudo-noise output from the pseudo-noise generator with an output from the loudspeaker output path envelope detection; and

an amplifier for combining an output from the gain cell with the signal from the loudspeaker output path.

24. (new) The speakerphone of claim 23, further comprising:

a correlator connected to the pseudo-noise generator output and to the microphone input path to detect pseudo-noise correlation between signals in the input and output paths.

25. (new) The speakerphone of claim 24, further comprising:

envelope detection in the microphone input path; and

a loss control processor responsive to the envelope detection in the input path, to envelope detection in the output path and to an output from the correlator, to insert loss in one of the paths to prevent signal feedback between the input and output path.

26. (new) The speakerphone of claim 25 further comprising:

a filter coupling the correlator to the loss control processor.

27. (new) The speakerphone of claim 25, further comprising:

a gain cell in the output path and a gain cell in the input path, the gain cells being connected to the loss control processor for inserting the loss.